

(11)Publication number:

2001-008463

(43) Date of publication of application: 12.01.2001

(51)Int.CI.

HO2M 7/48

(21)Application number: 11-167894

(71)Applicant: MATSUSHITA ELECTRIC IND CO

LTD

(22)Date of filing:

15.06.1999

(72)Inventor: KITAIZUMI TAKESHI

SUMIYOSHI SHINICHIRO

OKUDE TAKAAKI **OHASHI MASAHARU** 

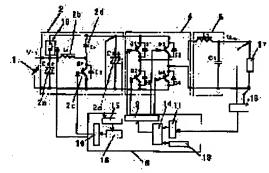
IZAKI KIYOSHI

SADAHIRA TADASHI SATO TAKETOSHI **OMORI HIDEKI** 

## (54) SYSTEM LINK INVERTER DEVICE WITH AUTONOMOUS OPERATION FUNCTION (57)Abstract:

PROBLEM TO BE SOLVED: To improve input/output conversion efficiency at an autonomous operation by providing a switching means shorting the positive terminal of a filter capacitor in the input stage of a booster converter and the positive terminal of a capacitor in an intermediate stage at autonomous operation.

SOLUTION: A system link inverter device with autonomous operation function is provided with a booster converter 2 boosting input voltage from a DC input power 1, an inverter 4 generating the AC current of a sine wave, which is synchronized with a power system from the boosted voltage, and an output filter 5. An output voltage detecting means 18 and a switching means 19 are installed. When the voltage of input power 1 is not less than about DC 145 V when the power of AC 100 V is supplied to a load 17 at autonomous operation, a booster switching element 2c is not operated and power is supplied to the inverter 4, while



the boosting operation is not executed. Power loss in a DC reactor 2b and a booster diode 2d can be reduced, by setting the switching means 19 to an on state.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection

[Kind of final disposal of application other than the examiner's decision of rejection or

application converted reseation]

- [Date of final disposal for application]
- [Patent number]
- [Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office